

Amendments to the Claims:

Please cancel claims 4-6, 8-10, 12-14, 16, 20-22, 24-26, 28-30 and 34-59 and amend claims 17-19, 23, 27, 31 and 32 as shown in the following list of claims.

This listing of claims will replace all prior versions and listings of claims in the application:

1. (original) A feedforward equalizer for equalizing a sequence of signal samples received from a remote transmitter, the feedforward equalizer having a gain and being included in a receiver, the receiver having a timing recovery module for setting a sampling phase and a decoder, the feedforward equalizer comprising:

- (a) a non-adaptive filter receiving the signal samples and producing a filtered signal; and
- (b) a gain stage coupled to the non-adaptive filter, the gain stage allowing adjustment of the gain of the feedforward equalizer by adjusting the amplitude of the filtered signal, the amplitude of the filtered signal being adjusted so as to fit in operational range of the decoder;

wherein the feedforward equalizer does not affect the sampling phase setting of the timing recovery module of the receiver.

2. (original) The feedforward equalizer of claim 1 wherein the feedforward equalizer does not enhance noise.

3. (original) The feedforward equalizer of claim 1 wherein the non-adaptive filter produces a precursor included in the filtered signal, the precursor being an indicator preceding each of the signal samples to facilitate timing recovery.

4-6. (canceled)

7. (original) The feedforward equalizer of claim 1 wherein the non-adaptive filter substantially eliminates from the received signal samples intersymbol interference introduced by pulse shaping at the remote transmitter.

8-10. (canceled)

11. (original) The feedforward equalizer of claim 1 wherein adjustment of the gain of the feedforward equalizer is programmable.

12-14. (canceled)

15. (original) The feedforward equalizer of claim 1 further comprises a noise cancellation stage, the noise cancellation stage subtracting from the filtered signal a noise signal received from a noise computing module of the receiver and producing a noise-reduced filtered signal.

16. (canceled)

17. (currently amended) A method for equalizing a sequence of input samples received at a receiver from a remote transmitter, the receiver having a timing recovery module for setting a sampling phase and a decoder, the method comprising ~~the operations of:~~

(a) filtering the input samples using a non-adaptive filter to produce a filtered signal; and
(b) adjusting the amplitude of the filtered signal so that the amplitude of the filtered signal fits in operational range of the decoder;

wherein operations (a) and (b) do not affect the sampling phase setting of the timing recovery module of the receiver.

18. (currently amended) The method of claim 17 wherein ~~operations (a) and (b)~~ filtering the input

samples and adjusting the amplitude of the filtered signal do not amplify noise.

19. (currently amended) The method of claim 17 wherein ~~operation (a)~~ filtering the input samples includes ~~the operation of~~ providing a precursor in the filtered signal, the precursor being an indicator preceding each of the signal samples in the filtered signal to facilitate timing recovery.

20-22. (canceled)

23. (currently amended) The method of claim 17 wherein ~~operation (a)~~ filtering the input samples includes ~~the operation of~~ substantially eliminating from the received signal samples intersymbol interference introduced by pulse shaping at the remote transmitter.

24-26. (canceled)

27. (currently amended) The method of claim ~~1~~ 17 wherein adjustment of the amplitude of the filtered signal is programmable.

28-30. (canceled)

31. (currently amended) The method of claim 17 further ~~comprises the operation of~~ comprising:

(c) producing a noise-reduced filtered signal by subtracting from the filtered signal a noise signal received from a noise computing module of the receiver.

32. (currently amended) ~~The method of claim 31 wherein producing a noise reduced filtered signal is performed prior to adjusting the amplitude of the filtered signal, thereby allowing the noise signal to be substantially unaffected by adjustment of the amplitude of the filtered signal.~~

A method for equalizing a sequence of input samples received at a receiver from a remote transmitter, the receiver having a timing recovery module for setting a sampling phase and a decoder, the method comprising:

(a) filtering the input samples using a non-adaptive filter to produce a filtered signal;
and

(b) producing a noise-reduced filtered signal by subtracting from the filtered signal a noise signal received from a noise-computing module of the receiver; and

(c) adjusting the amplitude of the noise-reduced filtered signal such that the amplitude of the filtered signal fits in operational range of the decoder;

wherein operations (a) and (b) do not affect the sampling phase setting of the timing recovery module of the receiver.

33. (currently amended) A system for demodulating a sequence of input samples received from a remote transmitter, the system being included in a receiver, the receiver having a timing recovery module for setting a sampling phase, the system comprising:

(a) a feedforward equalizer having a gain, receiving and equalizing the input samples; and
(b) a decoder system coupled to the ~~feed-forward~~ feedforward equalizer to receive and decode the equalized input samples;

wherein the feedforward equalizer does not affect the sampling phase setting of the timing recovery module of the receiver.

34-59. (canceled)